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FARMING THE "MIRACLE"

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ABSTRACT

The peaceful political transition of South Africa in 1994 was widely considered to be a "miracle". Now, nine years later, the "miracle" is firmly entrenched in the society. But, how did the average farmer adapt to the changes resulting from this "miracle"? This is the question to be addressed in this paper. Following a brief historical overview, the underlying structural changes will be discussed and building on this basis the mayor overt changes will be identified. The reactions of farmers will be discussed with the aid of two case studies of which the first will be based on the wheat industry and the second on the wool industry of the Western Cape Province of South Africa. Finally, specific conclusions regarding vertical and horizontal relationships will be made.

Introduction

27 April 1994. The first truly democratic elections in the history of South Africa and a section of the South African population await the dawn of a new era with trepidation while other sections of society expects the onset of paradise. But, lo and behold, on the morning of the 28th the sun still rises in the east, farmers in the Western Cape¹⁷ start their tractors to plant their wheat and a world-record of international aeroplane tickets go unused. Due to large household stocks, the sales of candles and bully-beef will be under pressure for the foreseeable future. An extremely large contingent of disgruntled foreign correspondents tries to find someplace on earth that show a little bit more inclination towards violence; after all, festivities are only news for so long. Everything is the same as before. Or is it?

The South African transition is important from two perspectives. First, a major shock to a sector often provides an ideal opportunity to investigate the nature of particular relationships; in this case between agriculture and the political environment. Second, South Africa is not the only country in history, and probably will not be the last, to experience major political or economic transitions. Thus, the local lessons learned may be of importance to others. To this end, it is first necessary to briefly explain the historical background to this relationship between the agricultural sector and the political environment. This will be followed by a description of the underlying structural changes and the resulting overt changes. Finally, two case studies will be used to indicate how farmers adapted to this changing environment.

One of the 9 provinces of South Africa and the only region with a Mediterranean climate in Sub Saharan Africa. Agricultural conditions and the shape of the coastline show profound similarities to that of Western Australia. It is also known as the breadbasket of South Africa and for the exports of wine, deciduous fruit and proteas. However, as the farmers are very serious about rugby the export of rugby-players (i.e. Tiaan Strauss to Australia and Joel Stransky to the UK) are considered to be traitorous.



Setting the scene

South African agriculture started on the road to commercialisation only after the discovery of diamonds and gold in the latter part of the previous century opened up a consumer market in the interior of the country. The creation of a dualistic sector also started almost immediately, as commercial (white) farmers lobbied their governments for protection against competition from African farmers (Bundy, 1979). A wide range of apartheid measures were institutionalised in the period after 1948. The result was the marginalisation of African farmers and a high degree of support to commercial farmers (Vink, 1993). These legislative measures affected agriculture both directly and indirectly and contributed to the increased isolation of the country during the 1970s and 1980s.

During this period commercial agriculture followed a conventional development path, showing a decline in its GNP contribution from 22% in 1920 to 5,1% in 1994 (Abstract, 1999), while its share in employment dropped from 33% in 1921 to 12,5% in 1993 (Vink and Kirsten, 1999). The 'subsistence' part of South African agriculture, on the other hand, followed a different path. For instance, the output for each worker in commercial agriculture was twenty times higher than in subsistence agriculture, while the contribution of agriculture to the regional economies of the former homeland areas was above 25% by the late 1980's. The same was true for employment, where up to 85% of the economically active population were engaged in agriculture (Van Rooyen 1990).

The transition

These differences between commercial and subsistence agriculture can be traced to the political dispensation in South Africa, which was based on the enfranchisement of the white minority. Augmenting the political importance of agriculture was the fact that, in the Westminster-style political system, rural electoral districts were weighted to the detriment of urban areas. Although the franchise was partially expanded in 1983, de facto political power remained in the hands of whites. Under these circumstances the interface between politics and agriculture reflected the interests of commercial farmers. This changed with the political transition when the base of the electorate was expanded to include the whole population.

This changing political calculus is represented in Table 1 within the framework supplied by Bonnen and Schweikhardt (1998). The data illustrate in a stylised manner how politicians' collective perception of agriculture has changed as the transition took hold. Today, South African politicians concentrate far more on the disadvantaged section of the agricultural community, and thus see the sector as one in transition rather than only as a commercially successful sector.



Table 1: Some comparative characteristics of the agrarian economy of South Africa

			South	African
	International experience ^a		agriculture as perceived by	
Agrarian sector economic				
characteristics			politi	cians
	Developin	Developed	'Before'	'After'
	g		Deloie	Allei
Income Elasticity of Demand	0,8 – 0,9	0,1 – 0,2	0,42 b	0,65 ^b
Price Elasticity of Demand (SR)	-0,4	-0,3	Inelastic	> elastic
Price Elasticity of Demand (LR)	-1,0	-1,0		
Price Elasticity of Supply (SR)	0,1 - 0,2	0,1	0,92 °	> elastic
Price Elasticity of Supply (LR)	0,4 – 1,2	0,8 – 1,0		
% of Population Rural	80 – 90 %	2 – 25%	11 % ^d	53 % ^d
% Econ. active voters in farming	30 – 90 %	1 – 13%	4 % ^e	12,5 % ^f
% Farm Sector Income is of GDP	20 – 50 %	1 – 8%	5,1 ^g	5,1 ^g
% of Farm Inputs Purchased	0 – 20%	50 – 85%	High	Lower
Productivity of Farm Sector	Low	High	High	Lower
Capital/Total Land in Farms Ratio	Low	High \$1 020/A	959 ^g	845 ^g
Capt./Total Farm Labour Force Rat.	Low	High	263 229 e&g	54 713 ^{e&g}
Number of Farms	Many	Declines by °	62 427 ^g	1 355 027
				g
Size of Farms	Very Small	Size inc. 10x	1 380 ^g	74 ^g
Rural/urban income gap			95 % ^h	33 % ^h
Farm units as % econ. active pop.			2,69 % ^{g&h}	14,2 % ^{g&h}
Food % consumer expenditure			11,6 % ⁱ	19,88 % ⁱ



Source: ^a Bonnen & Schweikhardt (1998: 4); ^b Calculated from Loubser (1990); ^c Van Schalkwyk & Groenewald (1993); ^d Calculated from CSS (1991); ^e CSS (1993); ^f Vink and Kirsten (1999); ^g Calculated from NDA, 1998; ^h CSS (1994); ^f CSS (1997).

It is important that the information in Table 1 is correctly interpreted. For instance, it is not as if the size of farms decreased overnight from 1 380 hectares to 74 hectares. The argument is that the smaller farms (subsistence) farms did not feature on the radar screen of politicians as that section of society was disenfranchised before 1994. Of course, this situation changed after the transition.

The aftermath

The information in Table 1 leads to the expectation of a decline in the level of support to agriculture. Johnston and Mellor (1961) argue that, in developing countries, agriculture forms a significant part of the economy and therefore of the tax base. Thus the sector is a supplier of production factors to the rest of the economy rather than a recipient of subsidies. The analysis of Krueger et al (1988), the time series analysis of Gorn et al (1993) and the simulated accounting matrix of Anderson (1995) support this argument.

In South Africa, this change took the form of the following overt policy shifts, challenges and farmer's reactions:

- ➤ A sharp decline in the support of agriculture. Although the Producer Subsidy Equivalent (PSE) for the South African agriculture was 4% (compared to the 6% of Australia and 2% of New Zealand) in 1999, this translates into producer support of only \$160 for each farmer in South Africa (New Zealand = \$1 000; Australia = \$3 000). The challenge for local farmers are to compete on this uneven playing field, especially if the local situation is compared to the PSE's of the US (24%), EU (49%), Japan (65%), Norway (69%), Switzerland (73%) and South Korea (74%). Translating this into monetary terms, the average farmer in the EU can rely on risk-free support to the value of \$17 000 per year. In the US, this support is \$21 000, in Korea \$24 000, Japan \$26 000, Switzerland \$32 000, Norway \$33 000 and Iceland \$36 000 (OECD, 2000). Some of the implications of these lower levels of government support are the total absence of a safety net for farmers. Furthermore, the real value of the government budgetary allocation to the Agricultural Research Council has been reduced by 25% since 1995. As this trend may eventually lead to a decline in relative technological competitiveness, visionary farmers voluntarily contribute to industry specific levies.
- > At the same time subsidised interest rates has been removed and the Agricultural Credit Board (a state-sponsored last-resort financing mechanism) dismantled. The result was that farmers became more dependent on commercial financial institutions and the financial rigours associated with these institutions. Although a number of farming enterprises had to be liquidated, the productive capacity of those farms were not lost. To the contrary, capital investments by the new owners (often foreign) resulted in significant expansion of the production capacity in some cases.
- > Import tariffs (especially those on agricultural products) have been reduced to well below South Africa's bound rate commitments under the Marrakech Agreement (Vink 1998). Although this is contrary to international experience (where the tariff barriers of developing countries are generally higher than developed countries if the effect of food aid is excluded), it is consistent with the increased importance of food as a percentage of consumer expenditure (See Table 1). Thus, given the large low-income section of society, lower food prices are a political imperative. The removal of tariff protection resulted in farmers,



for the first time, facing international competition in the domestic market. Farmers reacted to this trend by increasing their levels of productivity. Over the period 1994 to 2000 the real productivity in the agricultural sector increased by 31 percent, or more than five percent per annum (Abstract, 2002). This was partly possible through efficiency gains, but also through the withdrawal of marginal land from agricultural production.

> Although the deregulation of (domestic) agricultural markets started in the late 1980's, state trading enterprises (Marketing Boards) were finally dismantled following the introduction of the revised Agricultural Marketing Act of 1996. Before this date a wide range of measures, ranging from single channel export marketing (fruit, wine), through pool (wool, mohair) and fixed price (wheat, maize) systems to unregulated products (vegetables), were in place to ensure "orderly marketing". The result of the deregulation was the proliferation of a wide range of new and untested marketers and exporters as well as the removal of a "purchaser of last resort" (the latter especially made life difficult for previously disadvantaged farmers). For instance, within a couple of years the number of deciduous fruit exporters increased from 1 to 132 and it is known that one of these new exporters tried to sell five times the total volume of the South African dried fruit crop on the European market! It is evident that these actions would lead to South African farmers competing with each other (and often with themselves) on the export market and, subsequently, receiving lower prices for their products. Fortunately, the Perishable Products Export Control Board (PPECB - responsible for SPS and export quality control) remained in place with the result that the good-quality image of South African fruit remains intact. Farmers reacted to this situation by voluntarily organising themselves into non-profit organisations. The purpose of this organisation is on the one hand to "certify" the status, markets and track-record of exporters and on the other hand to co-ordinate the actions of exporters. At the last count exporters, which received a clean bill of health by this organisation, exports 95% of South Africa's deciduous fruit. However, the disadvantages of the initial confusion was dwarfed by other benefits (i.e. the lifting of sanctions) as is illustrated by the fact that the real (1995) value of agricultural exports increased from R63 billion in 1992 to R115 billion in 2000 (Abstract, 2002).

> While the output side of agricultural production was deregulated, labour markets are increasingly being regulated through legislation on the eviction of farm workers, basic conditions of employment and minimum wages. This is the result of the relatively small voting power of commercial farmers, the inability of commercial agriculture to shed the "apartheid" image and the strong role of organised labour in the governing coalition. Farmer's reactions to this development include higher levels of mechanisation and training of farm workers in order to ensure efficiency gains.

Finally, in order to ensure social, economic and political stability (irrespective of the specific political party in power) land reform must form an important part of agricultural policy. Recent developments in neighbouring countries again underlined this statement. The objective of the current government is to redistribute 30% of agricultural land by 2015 on a willing buyer/willing seller principle. Without going into detail and while acknowledging that certain problems do exist, it can be stated that the programme is going well. Especially important is the fact that a majority of commercial farmers are viewing this programme in a positive light and numerous examples of voluntary mentorship relations between commercial farmers and land reform beneficiaries do exist. Furthermore, some commercial farmers enter into equity-share agreements with some of their farm workers.



Case studies

For the purpose of this paper two case studies will be briefly discussed. The focus will respectively be on efficiency gains on the production and on the marketing side. In the first case study (van der Merwe, 2001) farmers in the Swartland¹⁸ area are considering pooling their resources in order to gain scale efficiencies. In this way a farming unit of 8 000ha can be created if twenty farmers, each with an average unit of 400 ha, should "charter" their units to the farming operations company. The farmers would be shareholders in the farming operations company, but would retain ownership of their land. Without going into detail and without calculating the efficiency gains resulting from purchasing power, specialisation, dedicated marketing management and financial management, clear benefits are obvious. The number of tractors and implements can be reduced by 75% and the number of combine harvesters by 70% with the result that the capital investment per hectare in movable equipment is reduced by 68%. As a result the return on capital increases from 6% to 13% and, more important, the return on own capital increases from 2% to 21%. It is clear that the negative own to foreign capital leverage can be turned into a positive situation.

In the second case study (De Beer, 2002) eight farmers in the Overberg¹⁹ region decided in 1999 to establish a voluntary quality control entity to increase the value of their wool output. The Merino flock in the Overberg region was traditionally known for their genetic superiority in the production of fine wool, but due to the pool system they could never receive the true premium associated with the quality in the past. In order to use the "Overberg wool" name, farmers must become members of the marketing entity and adhere to certain strict production guidelines regarding genetics and chemical as well as physical contamination. A system of peer inspection (self policing) was introduced in order to protect the image value and characteristics of the name. The success of the initiative is evident in the number of farmers joining the group and the increase in the membership dues. The group is currently exploring the possibilities of further integrating their downstream activities.

Conclusion

It is clear that agriculture emerged from a protected and supported environment into a much more open and self-reliant atmosphere. Despite the fact that individual cases of hardship did occur and that the aggregate of changes resulted in hard-line reactions within certain circles, the agricultural sector emerged stronger and more vibrant than before. The nature and size of the paradigm shift was evident in farmers reactions when, recently, certain individuals raised the possibility of a return to regulated marketing. The South African economy is clearly within the realm of the "Washington Consensus" (despite the fact that the South African Communist Party is part of the governing coalition) – more the pity that higher levels of foreign direct investment seem to elude the local economy.

The Swartland is a predominantly wheat/sheep farming area, with farming conditions similar to that of Western Australia, on the West Coast of the Western Cape Province.

The Overberg is a predominantly wheat/barley/sheep farming area, with climate similar to that of the Swartland, on the South Coast of the Western Cape.



Biographical Note

After completing his bachelor's degree, Dirk Troskie started his career by farming on the family farm. However, realising it is easier to give advice than to try to do it yourself, he soon took up lecturing in farm management at the Kromme Rhee Agricultural College before joining the Western Cape Department of Agriculture. Since 1996 he is Deputy Director: Agricultural Economics. In his career he has published 24 peer-reviewed scientific papers, 14 substantial reports, drafted 5 Bills and published more than 160 popular articles and papers on subjects ranging from macroeconomics to farm level issues. The University of Stellenbosch awarded him his PhD (Agricultural Economics) in March 2001. dirkt@wcape.agric.za

References

Abstract (2002) Abstract of Agricultural Statistics. National Department of Agriculture, Pretoria.

Abstract (1999) Abstract of Agricultural Statistics. National Department of Agriculture, Pretoria.

Anderson, K (1995) Lobbying Incentives and the Pattern of Protection in Rich and Poor Countries. *Economic Development and Cultural Change*, 43 (2): 401 – 423.

Bonnen, JT & Schweikhardt, DB (1998) The future of U.S. Agricultural Policy: Reflections on the Disappearance of the "Farm Problem". Review of Agricultural Economics, 20 (1): 2 – 36.

Bundy, C (1979) The Rise and Fall of the South African Peasantry. London, Heinemann.

CSS (1997) Income and Expenditure of Households, Statistical Release P0111.1 to 9. Central Statistical Service, Pretoria.

CSS (1994) Household Census, Statistical Database. Central Statistical Service, Pretoria.

CSS (1993) Census of Agriculture (1993), Report No. 11-02-01. Central Statistical Service, Pretoria.

CSS (1991) Population Census (1991), Report No. 03-01-08. Central Statistical Service, Pretoria.

De Beer, EF (2002) Overberg Wol: Riglyne. NWKV, Caledon.

Gorn, P, Herrimann, R & Schalk, B (1993) The Pattern of Protection for food crops and cash crops in Developing Countries. European Review of Agricultural Economics, 20 (3): 291 – 314.

Johnston, BF & Mellor, JW (1961) The Role of Agriculture in Economic Development. *American Economic Review*, 51 (4): 566 – 593.

Krueger, A, Schiff, M & Valdes, A (1988) Agricultural Incentives in Developing Countries: Measuring the Effect of Sectoral and Economywide Policies. World Bank Economic Review, 2 (3): 255 – 271.

Loubser, MM (1990) Income elasticities of the Demand for Consumer Goods and Services. Research Report No. 175, Bureau of Market Research, University of South Africa, Pretoria.

NDA (1994) Production Accounts. National Department of Agriculture, Pretoria.

OECD (2000) Producer support estimates. Organisation for Economic Co-operation and Development, http://www.oecd.org.

Van der Merwe, C (2001) Maatskappyboerdery in Moorreesburg. MKB Landbou Bestuursdiense, Moorreesburg.

Van Rooyen, CJ (1990) Agricultural Restructuring in Southern Africa: The Contribution of the Developing Agricultural Sector. Agrekon, 29 (1): 3 – 10.

Van Schalkwyk, HD & Groenewald, JA (1993) An Estimate of Aggregate Supply Response in South African Agriculture. Development Southern Africa, 10 (4): 549 – 558.



Vink, N (1993) Entrepreneurs and the political economy of agriculture in South Africa. Agrekon 32(4): 153-166 Vink, N (1998). The political/institutional environment. <u>In Spies, PH (Ed.) Agrifutura 1997/98</u>. University of Stellenbosch, Agrifutura Project

Vink, N and J Kirsten (1999) A descriptive analysis of employment trends in South African agriculture Agrekon 38(2): 204-228